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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,733	04/16/2001	Joerg Schlieffers	TELNP226US	6743

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EXAMINER

LEE, DIANE I

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/835,733	Applicant(s) SCHLIEFFERS ET AL.	
	Examiner D. I. Lee	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of the Applicant's Replay filed 03 September 2003.
2. Receipt is also acknowledged of the Terminal Disclaimer filed 03 September 2003 to overcome the Double Patenting Rejection (37 CFR §1.321(c)). The terminal disclaimer filed on 03 September 2003 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of the full statutory term of U.S. Patent Nos. 5,979,770 and 6,244,513 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
5. **Claims 21-24, 28-29, and 31-32 are remain rejected under 35 U.S.C. 103(a) as being unpatentable over Petteruti et al. [US 5,335,170-referred as Petteruti].**

Re claim 21: Petteruti disclose the hand-held optical device comprising:

a body (i.e., the body is defined by the upper section of the device 50 having a head portion 44 and the master module 10, which mates with the head portion 44 via an interconnector 48) having

- a first distal end (i.e., the scanning side of the body),
- a proximal end (i.e., toward the master module side 10 and opposite side of the distal end, and
- an optical scanning module arranged to scan objects in a direction outward from a first distal end (i.e., scanner 43), the body including an upper surface having a display 34 mounted thereon (see figure 2A-2B).

a handle 42 that extends from a bottom surface of the body (see figure 2A). The handle 42 being joined at a selected angle with respect to the body. The handle extends from a bottom surface of the body at the first distal end (see figure 2A) such that the bottom surface of the body rests on a radial surface of a user's hand when the user grasps the handle.

Petteruti does not explicitly state that the handle, which extends from a bottom surface of the body at the distal end, increases a viewing angle of the display.

However, due to the fact that the construction of the Petteruti's scanner applies its body weight (i.e., through the proximal end of the body portion) to the user's hand when the user grasps the handle portion and distributes its body weight of the scanning device on the radial surface of a user's hand. Therefore, when the user grasps the handle portion, the user obviously has a greater ability to adjust the viewing angle of the display by maneuvering the proximal end of the bottom surface of the body with the user's wrist (the specific illustration not shown in figure). Therefore, the handle being configurable to accommodate the user's hand (see figure 2A). Accordingly, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to recognize that the bottom surface of the body to rest on a radial surface of a user's hand would obviously provide a flexibility of maneuvering the scanning device so as to increase a viewing angle of the display.

Re claims 22-24 and 28: Petteruti shows that the handle is integrally molded with the bottom of the body and includes a trigger 46, which activates the scanner (i.e., actuate the reading process). The trigger can be single or dual finger trigger (i.e., the user may apply a single or dual fingers to actuate the trigger) (see figure 2A).

Re claim 29: Petteruti teaches the scanning device having a RF antenna 40 and associated RF electronics 39 to allow wireless RF communication (see col. 2, lines 28+).

Re claim 31: Due to the fact that Petteruti teaches that the scanning device having a controller 82 which processes the digital signal (see col. 5, lines 57+ and col. 6, lines 4+), it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to recognize that the display device would be a digital display since the controller controls the CCD scanner and the display device thereof.

Re claim 32: the body portion having a CCD scanner 90, a controller 98, a LCD display 34, a keyboard 36, and EEPOT 112, wherein the EEPOT is controlled by the input means (i.e., a keyboard 36) to control the output of the charge pump, which in turn controls the contrast of the display 34 under the control of the CPU 98 (see col. 6, lines 30+). This obviously teaches that the CPU provides a display option in the contrast of display and the display is configurable to adapt to a user's preference in the contrast of display based upon whether a user enters the user's preference in the contrast of display through the keyboard.

6. **Claims 14-17, 20, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petteruti et al. [US 5,335,170-referred as Petteruti] in view of Tracy et al. [US 5,979,757-referred as Tracy].** The teachings of Petteruti have been discussed above.

Re claims 14, 20, and 33-34: Petteruti discloses a hand-held optical device 50 (see figure 2a), comprising:

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a body (the upper section of the device 50 having a head portion 44 and the master module 10, which mates with the head portion 44 via an interconnector 48) including an upper surface having a display 34 mounted thereof (see col. 2, lines 16+ and figure 2A) and wherein the display having a horizontal configuration (i.e., figure 1 shows the display is configured such that the information would be displayed horizontally relative to the user's view);

a handle 42 that extends from a bottom surface of the body (see figure 2A); and

the body portion having a CCD scanner 90, a controller 98, a LCD display 34, a keyboard 36, and EEPROM 112, wherein the EEPROM is controlled by the input means (i.e., a keyboard 36) to control the output of the charge pump, which in turn controls the contrast of the display 34 under the control of the CPU 98 (see col. 6, lines 30+). This obviously teaches that the CPU provides a display option in the contrast of display and the display is configurable to adapt to a user's preference in the contrast of display based upon whether a user enters the user's preference in the contrast of display through the keyboard.

Petteruti does not disclose the display being configurable according to the user's hand (i.e., a left hand or right hand) and wherein the user's preference includes at least one of a horizontal configuration and a vertical configuration.

Tracy discloses a hand-held optical scanning device for communicating information over a wireless communication network. Tracy shows that the hand-held optical scanning device includes a body 70, 100 having a display mounted thereof (see figure 2, 4-5, and 7). Tracy further teaches that the display having a horizontal configuration (i.e., the figure 2, for example, shows the display is configured such that the information would be displayed horizontally relative to the user's view) and the microcomputer 701 provides the display option in accordance with horizontal configuration of the scanner to orient the display information based at least in part upon whether a user selects his or her preferred display option (the display is configurable according to user's preference, i.e., a reconfiguration key setting 79A which permits the system to automatically reconfigured its display to reflect the user's

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preference based on whether a user selects his or her preferred display option) for the position or arrangement of the scanning device. This reconfiguration key will automatically reconfigure the display to change the display configuration from the first configuration (i.e., the horizontal configuration to provide displaying information horizontally, e.g., a landscape view) to a second configuration (i.e., the vertical configuration to provide displaying information vertically, e.g., a portrait view) (see col. 5, lines 10+). Therefore, the controlling means in the scanning device of Tracy obviously reconfigure the orientation of the display information accordingly to the selection activated by the reconfiguration key setting 79A.

In view of Tracy's teaching, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate a reconfigurable display feature (i.e., display having a reconfiguration function) in the device of Petteruti in order to provide a display which capable of reconfiguring its orientation to reflect the user's preference and/or the position or arrangement of the device. Such modification would have provided Petteruti with a scanning device with a display that configure to accommodates a user's preferences and provide a correct alignment of the display information for a proper viewing.

Although Tracy teaches the display automatically reconfigurable from the first configuration (i.e., the horizontal configuration to provide displaying information horizontally, e.g., a landscape view) to a second configuration (i.e., the vertical configuration to provide displaying information vertically, e.g., a portrait view) to reflect the user's preference, Petteruti as modified by Tracy is silent with respect the specific user's display option selections, such as a left hand or right hand.

However, it would have been an obvious to an artisan of ordinary skill in the art at the time the invention was made to recognize that such modification (i.e., specific user's display option selections includes a left hand or right hand) would have been obvious extension taught by Petteruti as modified by Tracy for the specific user's display option selections of a left hand or right hand obviously encompasses

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by the user's preference choices, therefore, providing an additional user's selection would have been an obvious extension taught by Petteruti as modified by Tracy to further accommodate the user's needs. Furthermore, since applicant has only claimed the type of the display option selection (e.g., a left hand or right hand display option) and has not specifically defined the configuration of the left hand display nor the configuration of the right hand display, the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Re claims 15: Petteruti shows that the handle is integrally molded with the bottom of the body and includes a trigger 46, which activates the scanner (i.e., actuate the reading process). The trigger can be single or dual finger trigger (i.e., the user may apply a single or dual fingers to actuate the trigger) (see figure 2A).

Re claim 16-17: Petteruti teaches the scanning device having a RF antenna 40 and associated RF electronics 39 to allow wireless RF communication (see col. 2, lines 28+).

7. **Claims 18-19, 25-27, and 30 are remain rejected under 35 U.S.C. 103(a) as being unpatentable over Petteruti as modified by Tracy as applied to claim 14 above, and further in view of Reynolds et al. [US 5,828,052-referred as Reynolds].** The teachings of Petteruti as modified by Tracy have been discussed above.

Re claims 18, 25-27, and 30: Petteruti as modified by Tracy does not disclose the body including a lower housing member and an upper housing member that forms a cover, a resilient sealing member interposed between the lower housing member and cover to form a dust and moisture resistance seal there between.

Reynold discloses a hand-held optical scanning device 20 having a body portion 22, 34 and a handle portion 26 that extends from a bottom surface of the body portion. The handle being joined at a

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selected angle with respect to the body to cause a proximal end of a bottom surface of the body to rest on a radial surface of a user's hand when the user grasps the handle. Reynolds further teaches that the body portion include a lower housing member 34 and an upper housing member 22 that forms a cover (see figure 3). The lower housing is made of elastomers to protect underlying surfaces of the scanner and extends a distance to cover substantial portion of periphery of the body. The lower housing provides an environmental protection by acting as a gasket between the body and the handle portions thereby inhibiting contaminants from entering into the interior of the scanner (see col. 3, lines 56+). This lower housing that is made of elastomers provides the claimed function of a resilient sealing member interposed between the lower housing member and cover to form a dust and moisture resistance seal there between. The lower housing also provides a bumping surface that protects a user's hand (see col. 3, lines 53+).

In view of Reynol's teaching, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the design structure of the body portion in the scanning device of Petteruti as modified by Tracy in order to provide an ergonomic structural of scanning device and to protect the internal components of the scanner from environmental contaminants.

Re claim 19: Due to the fact that Petteruti teaches that the scanning device having a controller 82 which processes the digital signal (see col. 5, lines 57+ and col. 6, lines 4+), it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to recognize that the display device would be a digital display since the controller controls the CCD scanner and the display device thereof.

Response to Arguments

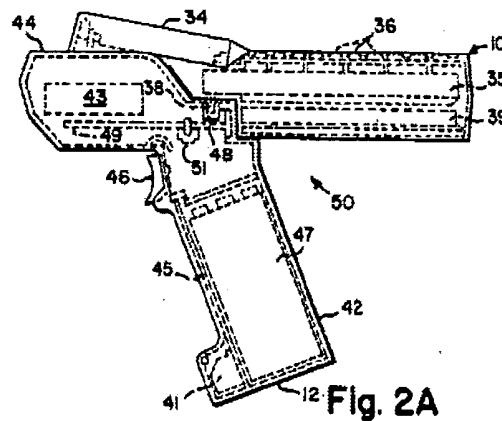
8. Applicant's arguments filed 04 September 2003 have been fully considered but they are not persuasive.

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Applicant argued that Petteruti et al. does not teach or suggest applicant's claimed invention that to reject claims in an application under 35 USC §103(a), an examiner must establish a *prima facie* case of obviousness, and further applicant's argument indicated that claim 21 recites in part an arrangement where a bottom surface of a scanner's body rests on a user's hand (i.e., wherever an operator employs applicant's claimed hand held scanner, a portion of the scanner's body extends over the radial surface of the user's hand), where such aspects of applicant's claimed invention are not taught or suggested by Petteruti et al. (see page 2, lines 5+ of the applicant's response). The examiner respectfully disagrees. In contrary to the Applicants' statement, all the rejections under 35 USC §103(a) in the prior and the instant Office Action established a *prima facie* case of obviousness meeting the three basic criteria of the M.P.E.P. 2143.03 (8th ed. 2001). The examiner clearly stated that Petteruti discloses the hand-held optical device having a body (see figure 2A).

Distal End →

← Proximal End



Wherein the upper section of the device 50 having a head portion 44 and the master module 10 combined defines the body. Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally

available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner has clearly pointed out rationale for appropriate combination of the references. Petteruti shows the body includes a first distal end (i.e., the scanning side of the body), a proximal end (i.e., toward the master module side 10 and opposite side of the distal end, and an optical scanning module arranged to scan objects in a direction outward from a first distal end (i.e., scanner 43), the body including an upper surface having a display 34 mounted thereon (see figure 2A-2B). Figure 2A shows a portion (i.e., the proximal end of the body) of the scanner's body extending outward toward user such that when user grabs the handle, the upper portion of the body (i.e., the proximal end of the body) would rest on the upper surface of the user's hand. Thus, during operation, the weight of the scanning device would be supported and maintained by the user's gripping of handle along with the upper surface of the user's hand for the proximal end of the body of the scanner's body (i.e., the head portion 44 and the master module 10 combined) would extend over the radial surface of the user's hand upon a gripping position of the handle by the user. Thus, the Applicants' argument on this point is not persuasive.

In response to applicant's argument, which applicant directs to col. 3, lines 45-50 of Petteruti reference "*note that either the laser scanning module 12 or the CCD module 14 generally can be used as a stand alone scanner without the master module connected to it*" that Petteruti in part teaches away from any arrangement of a bottom surface resting on a user's hand; the examiner respectfully disagrees. Applicant's referring in col. 3, lines 45-50 of Petteruti is an alternate stand-alone scanner that produces "raw" high and low data sequences representation of a bar code symbol, which does not have a capability to decode the sequences. The examiner relied on the hand-held optical scanning device having a body that is defined by the upper section of the device 50 including a head portion 44 and the master module 10 combined (see figure 2A). The body includes an upper surface having a display mounted thereof.

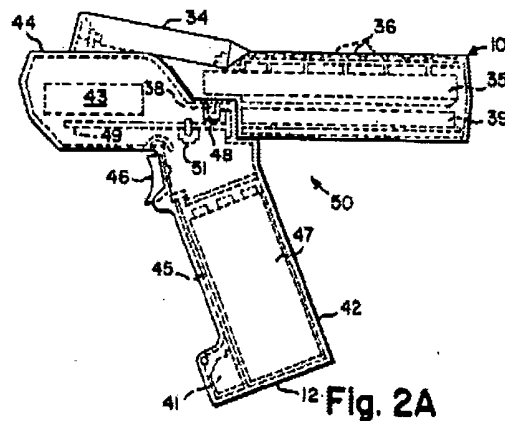
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Accordingly, Petteruti does not teach away from any arrangement of a bottom surface resting on a user's hand. Thus, the Applicants' argument on this point is also not persuasive.

In response to applicant's argument with respect to a recitation in claim 21, i.e., a handle that extends from a bottom surface of the body at the distal end to increase a viewing angle of the display, and that applicant's claimed invention positions the display closer to the operator, and increase a viewing angle formed by the plane of display surface and operator's line of sight surface (see page 3, lines 12+); the examiner respectfully disagrees. The examiner directs the applicant's attention to the specific recitation of claim 21 (i.e., "*a handle that extends from a bottom surface of the body at the distal end to increase a viewing angle of the display*"). The claim does not recites of increasing a viewing angle of the display formed by the plane of display surface and operator's line of sight surface. Furthermore, similar to applicant's arrangement, Petteruti also shows the arrangement. Petteruti also shows the handle

Distal End →

← Proximal End

**Fig. 2A**

extending from a bottom surface of the body at the distal end toward the proximal end (i.e., the handle is configured to bring user's body closer to the display), which positions the display closer to the operator and increase a viewing angle formed by the plane of display surface and operator's line of sight surface (see figure 2A). Moreover, as shown in figure 2A above, the handle extending from the bottom surface of

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the body at a selected angle from the distal end toward the proximal end. Such arrangement provides the portion of the bottom surface (i.e., distal end portion of the body) to rest on a radial surface of the user's hand when the user grasps the handle, thus provides greater maneuverability of the device by the user (i.e., provides greater control of changing the movement and/or direction of the device) and further increase the viewing angle of the display. Therefore, the Applicants' argument on this point is not persuasive.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. I. Lee whose telephone number is 703-306-3427. The examiner can normally be reached on Monday through Thursday from 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

A handwritten signature in cursive script, appearing to read "D. I. Lee".

D. I. Lee
Primary Examiner
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D. L.